

What is claimed is:

1. A method for service braking a vehicle by means of a service brake actuator (3) having a rotative motor, preferably an electric motor, as its service brake applying means, characterized in that energy from a loaded spring (14) in a spring brake actuator (6) connected to the service brake actuator (3) is released at will for supplying supplementary service brake energy to the service brake actuator.

2. A device for carrying out the method of claim 1 for service braking a vehicle by means of a service brake actuator (3) having a rotative motor, preferably an electric motor, as its service brake applying means, characterized by

a spring brake actuator (6) connected to the service brake actuator (3) and containing a powerful spring (14) and

control means for controlled release of energy from the spring when loaded, supplementary to the service brake energy supply from the service brake actuator.

3. A device according to claim 2, characterized in that the spring in the spring brake actuator (6) is a clock spring or spiral spring (14)

4. A device according to claim 3, characterized in that the spring brake actuator (6) comprises

the clock spring (14), attached at its outer end to a spring brake actuator housing (10) and mechanically charged at a rotation of the actuator shaft (11) in a brake release direction,

an electric coil (15) for keeping - when electrically energized - the clock spring in its charged condition, and

transfer means (12, 24, 18-22) for transferring the rotative energy of the clock spring to the actuator shaft in a brake applying direction, when the coil is deenergized, but allowing free rotation of the shaft in either direction, when the coil is energized.